

B. Amendments to the Claims:

Claims 1-36 have been cancelled.

37. (Amended). A method of inhibiting a T-cell response to an antigen, comprising:
culturing mesenchymal stem cells in the presence of IFN- γ ;
modifying said mesenchymal stem cells to present said antigen by contacting said
mesenchymal stem cells with said antigen in vitro, wherein said mesenchymal stem cells do not
produce co-stimulatory molecules in a sufficient amount to activate T-cells, whereby said
mesenchymal stem cells process present said antigen ~~into an antigen fragment for presentation~~
~~by said mesenchymal stem cells~~; and

administering to a host said modified mesenchymal stem cells, thereby inhibiting a T-cell
response to said antigen upon subsequent exposure of the T-cells to antigen presenting cells
which express co-stimulatory molecules.

38. (Previously presented). The method of Claim 37 wherein said mesenchymal stem cells
do not produce co-stimulatory molecules.

39. (Previously presented). The method of Claim 37 wherein said mesenchymal stem cells
are genetically engineered to express a molecule to block co-stimulation of T-cells.

40. (Previously presented). The method of Claim 39 wherein the molecule is membrane-
bound.

41. (Previously presented). The method of Claim 40 wherein the molecule is CTLA-4.

42. (Previously presented). The method of Claim 39 wherein the molecule is a soluble
protein.

43. (Previously presented). The method of Claim 42 wherein the molecule is CTLA-4-Ig
fusion protein.

44. (Amended). A method of inhibiting a T-cell response to an antigen, comprising:

culturing said mesenchymal stem cells in the presence of IFN- γ ;

modifying human mesenchymal stem cells to present said antigen by genetically engineering said human mesenchymal stem cells to express said antigen, wherein said human mesenchymal stem cells do not produce co-stimulatory molecules in a sufficient amount to activate T-cells, whereby said human mesenchymal stem cells present process said antigen into an antigen fragment for presentation by said human mesenchymal stem cells; and

administering to a host said modified human mesenchymal stem cells, thereby inhibiting a T-cell response to said antigen upon subsequent exposure of the T-cells to antigen presenting cells which express co-stimulatory molecules.

45. (Previously presented). The method of Claim 44 wherein the antigen is an autoantigen.
46. (Previously presented). The method of Claim 44 wherein the human mesenchymal stem cells are autologous to the host.
47. (Previously presented). The method of Claim 44 wherein said mesenchymal stem cells do not produce co-stimulatory molecules.
48. (Previously presented). The method of Claim 44 wherein said mesenchymal stem cells are genetically engineered to express a molecule to block co-stimulation of T-cells.
49. (Previously presented). The method of Claim 48 wherein the molecule is membrane-bound.
50. (Previously presented). The method of Claim 49 wherein the molecule is CTLA-4.
51. (Previously presented). The method of Claim 48 wherein the molecule is a soluble protein.
52. (Previously presented). The method of Claim 51 wherein the molecule is CTLA-4-Ig fusion protein.

Claims 53-59 have been cancelled without prejudice.